

U.S. DEPARTMENT L. COMMERCE National Oceanic and Atmospheric Administration

Auke Bay Fisheries Laboratory P.O. Box 155 Auke Bay, Alaska 99821

April 2, 1974

Mr. Art Schmitt Sport Fisheries Division Alaska Department of Fish and Game P. O. Box 499 Sitka, Alaska 99835

Dear Art:

I certainly enjoyed our phone conversation last week and am very pleased Sport Fish Division will be actively participating in fieldwork on the Port Walter area lake-stocking study. As I pointed out, your involvement in limnological aspects of the study on Osprey Lake this summer--especially water chemistry, plankton assessment (qualitative and quantitative), and echoacoustic evaluation of Dolly Varden abundance and distribtuion is a real windfall to the overall study. Hopefully we can eventually coordinate overall sampling schedules and observations on Tranquil, Ludvik, and Larry Lakes. I am looking forward to receiving a copy of your proposed work plan.

Yesterday Roy Martin and Al Wertheimer reported by radio from Little Port Walter that snow depth at the Tranquil Lake outlet trap was still 5 feet deep, so an early breakup doesn't appear too likely. They were considering activating the trap for monitoring early emigrants but couldn't find the live box under the snow.

I talked briefly with Mike Dahlberg of our salmon investigation staff about your comments and plans for the echo-acoustic work with the fine-line echo sounder. Mike has some experience with this type of gear and worked last summer with FRI and ADF&G-FRED people on Lake Nunavaugaluk. He felt that several aspects of echo-acoustic work on Port Walter area lakes hold real promise of producing meaningful work. He pointed out that minimizing or eliminating target identification problems by working with only one species in some cases plus having known numbers of planted fish and multiple estimates of populations all combine to provide some unique research opportunities.

I am enclosing two short publications by Lou Barr from this Laboratory on the construction and use of the small shrimp pots I mentioned. We think this principle has promise as a fish trap too--with some modification on the throat. Also enclosed is a crude sketch of the idea I've had for making a larger type of fish trap patterned somewhat after the shrimp pot construction. I hope to make a prototype for early test fishing this season. We do have at Little Port Walter a good supply of newly acquired, standard, double-funnel wire-mesh and plastic minnow traps.

Can we tentatively plan to meet here on April 30th for a general discussion session? Dick Crone should be here then and we could review both of our work plans before the lake work gets underway.

I have enclosed a copy of a status table on earlier Tranquil-Ludvik Lake fish data you might be interested in.

Sincerely,

William R. Heard Project Supervisor,

William R. Heard

Little Port Walter

Enclosures